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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,146	12/01/2003	Stephen G. Moore	7784-000674	1764

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HARNESSE, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

SORKIN, DAVID L

ART UNIT PAPER NUMBER

1723

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,146

Applicant(s)

MOORE ET AL.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01 December 2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, claims 27-40, in the reply filed on 28 September 2005 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 27-30 and 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoffer et al. "Ultrasonic Dispersion of Pigment in Water Based Paints" Journal of Coating Technology, June 1991, vol. 63, No. 767, pages 61-68. Regarding claims 27-29, Stoffer discloses a method of producing a coating, the method comprising receiving a coating component within a mixing reservoir (a 400 mL beaker, see first column of page 65); receiving an additive within the mixing reservoir (see tables 4-6); ultrasonically dispersing the additive with the coating component within the mixing reservoir (see page 65, first paragraph and tables 4-6); and cooling a mixture of the additive and coating component by allowing thermal energy transfer therefrom (see first column of page 65, "kept constant at ... bath temperature, T = 25°C" while energy is added at 250 watts). Regarding claim 30, the method further comprises mechanically agitating the mixture (page 65, first paragraph). Regarding claim 36, the ultrasonically dispersing comprises positioning a sonotrode within the mixing reservoir and applying

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energy to the sonotrode to generate ultrasonic energy which propagates through the base within the mixing reservoir (see first paragraph of page 65). Regarding claim 37, the receiving an additive within the mixing reservoir comprises receiving pigment particles within the mixing reservoir (see tables 4-6). Regarding claim 38, the receiving a coating compound within the mixing reservoir comprises receiving a binder within the mixing reservoir (see tables 4-6). Regarding claim 39, the receiving a coating compound with a mixing reservoir comprises receiving a solvent within the mixing reservoir (see tables 4-6). Regarding claim 40, the receiving a coating component within a mixing reservoir comprises receiving a resin carrier within a mixing reservoir (see tables 4-6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoffer as applied to claim 27 above, in view of Mapother (US 1,781,648). Stoffer does not disclose reduced pressure or degassing. Mapother ('648) explains that degassing an additive and maintaining a mixing chamber under vacuum result in improved mixing of paint (See page 1, lines 42-59). It would have been obvious to one of ordinary skill in the art to have evacuated a mixing chamber and degassed additive as taught by Mapother ('648) to achieve the improve wetting of pigment and thereby improve mixing as explained on page 1, lines 42-59).

7. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoffer as applied to claim 27 above, in view of Falcoff et al. (US 4,403,866). Stoffer does not teach receiving mixture with a heat exchanger and returning it to the mixing reservoir. Falcoff ('866) expressly states that it is "conventional" to remove paint from a mixing reservoir and run it though a water chilled heat exchanger before it is returned to the mixing chamber (see col. 4, lines 42-51). Therefore, it would have been obvious to one of ordinary skill in the art to have used the heat exchange technique of Falcoff ('866) in the method of Stoffer, as Falcoff explains the mixing typically raises the temperature of paint and that it is therefore important to cool it to maintain temperature (see col. 4, lines 42-51).


Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David L. Sorkin
Primary Examiner
Art Unit 1723

DLS